



# UNITED STATES PATENT AND TRADEMARK OFFICE

*lev*

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/409,457	09/30/1999	MARTIN C. FLAUTT	24649A	5361
30623 7590 01/02/2008 MINTZ, LEVIN, COHN, FERRIS, GLOVSKY AND POPEO, P.C. ONE FINANCIAL CENTER BOSTON, MA 02111			EXAMINER CHOI, LING SIU	
			ART UNIT 1796	PAPER NUMBER
			MAIL DATE 01/02/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/409,457	<b>Applicant(s)</b> FLAUTT ET AL.	
	<b>Examiner</b> Ling-Siu Choi	<b>Art Unit</b> 1796	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 October 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 50 and 52-73 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 50 and 52-73 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. The request filed on October 09, 2007 for a Request for Continued Examination under 37 CFR 1.114 based on parent Application No. 09/409,457 is acceptable and a RCE has been established. An action on the RCE follows.
2. This Office Action is also in response to the Amendment filed 10/09/2007. Claims 1-49 and 51 were canceled and claims 70-73 have been added. Claims 50 and 52-73 are now pending.

### *Claim Objections*

3. Claims 59 and 68 are objected to because of the following informalities:
  - (a) Claim 59 are objected to under 37 CFR 1.75(c), as being of improper dependent form for **failing to further limit the subject matter** of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 59 depends on claim 50, wherein "superabsorbent water-resistant polyacrylate polymer coating" is cited (line 3);
  - (b) Claim 68, lines 3-4, "anionic alkali salt polymer precursors and alkali metal salt polymer precursors" is suggested to be changed to --anionic alkali salt **of** polymer precursors and alkali metal salt **of** polymer precursors--.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

**4. The following is a quotation of the first paragraph of 35 U.S.C. 112:**

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 50 and 52-73 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 50, lines 2-3, the recitation of "a substantially homogeneous" is not supported from the Specification.

**6. The following is a quotation of the second paragraph of 35 U.S.C. 112:**

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 68 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 68, lines 2-4, the recitation "selected from the group of anionic salt forms of the polymer precursor consisting of anionic alkali salt polymer precursors and **alkali metal salt polymer precursors**" causes indefiniteness. Thus, the alkali metal salt polymer precursors would be anionic. Accordingly, "anionic alkali salt polymer precursors" appears to be the same as "alkali metal salt polymer precursors".

Claim 50, line 14; claim 70, line 8, the recitation of "latex" causes indefiniteness because it do not define a kind of polymer.

### ***Claim Analysis***

8. Summary of Claim 50:

An article at least partially coated comprising: at least one surface of said article at least partially coated with a <b>substantially homogeneous</b> superabsorbent water-resistant polyacrylate polymer coating comprising:	
i	at least one water-soluble superabsorbent polyacrylate polymer precursor in aqueous solution, which cures, when the coating is applied to said at least one surface;
ii	a non-particulate viscosity-modifying agent in the form of a solution or dispersion;
iii	a lubricant; and
iv	a film forming binder in aqueous solution compatible with the water-absorbing polyacrylate polymer and the non-particulate viscosity-

	modifying agent, said film forming binder selected from the group consisting of polyesters, polyurethanes, epoxies, latex and mixtures thereof,
	said superabsorbent, water-resistant polyacrylate polymer coating absorbing water when it is wetted and desorbing water when it is dried without loss of polyacrylate polymer

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 50, 52-64, and 67-69 are rejected under 35 U.S.C. 102(b) as being anticipated by Cossement et al. (US 5,236,982).

"Homogeneous" can be interpreted as a state where at least two phases are completely mixed. It is not necessary to be a state of true solution.

Cossement et al. disclose an article treated with an aqueous size composition, the composition comprising (A) a polyurethane/isocyanate **emulsion** containing blocked

isocyanates; (B) a homopolymer of acrylic acid monomer; (C) one or more amino organo-silane coupling agents; and water (claim 1). Cossement et al. also disclose that the composition further comprises a lubricant which includes vegetable and mineral oil, wax, and fatty acid monoester of polyalkyleneglycol and a processing aid (col. 5, lines 50-68), wherein either processing aid or amino organo-silane coupling agent reads on the viscosity-modifying agent. Thus, the present claims are anticipated by the disclosure of Cossement et al.

***Allowable Subject Matter***

11. Claims 65-66 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The references [Cossement et al. (US 5,236,982), Gaa et al. (US 4,810,576), Arroyo et al. (US 4,913,517), and Geursen et al. (US 5,534,304)] do not teach or fairly suggest the claimed article, wherein the viscosity-modifying agent includes alkyl cellulose, acrylamide, and mixtures thereof.

12. Claims 70-73 are allowable over the references [Cossement et al. (US 5,236,982), Gaa et al. (US 4,810,576), Arroyo et al. (US 4,913,517), and Geursen et al. (US 5,534,304)]. All these references do not teach or fairly suggest the claimed article, wherein the treating composition comprises the claimed components.

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Gaa et al. (US 4,810,576), Arroyo et al. (US 4,913,517), and Geursen et al. (US 5,534,304).

Gaa et al. disclose a glass fibers partially coated with the chemical treating composition, the composition comprising: (a) water soluble, dispersible or **emulsifiable** polyoxyethylene polymer having an effective film forming molecular weight; (b) water soluble, dispersible or emulsifiable aldehyde-condensate-reactable polymeric agents in an effective white-water compatible amount; (c) aldehyde-condensate-reactable organo silane coupling agents; (d) cationic lubricant; and (e) liquid carrier in an effective amount to apply the aqueous chemical treating composition to the glass fibers (claim 1).

However, Gaa et al. do not teach or fairly suggest the claim article, wherein the treating composition comprises the specific water-soluble superabsorbent polyacryllate polymer and the specific film forming binder including polyester, polyurethane, epoxy, latex, and mixtures thereof.

Arroyo et al. disclose a cable having longitudinally extending fibrous strength members treated with a superabsorbent liquid material which when dry fills interstices and covers portions of the exterior thereof (abstract). However, Arroyo et al. do not teach or fairly suggest the claimed article, wherein the superabsorbent liquid material comprises the specific components.



Geursen et al. disclose a substrate treated with a superabsorbent material, which is obtained by (A) applying to the surface of the substrate a treating composition of a water-in-oil **emulsion** which contains a superabsorbent material in its aqueous phase and (B) subsequently wholly or partially removing the liquid constituents of the emulsion from the substrate (abstract). However, Geursen et al. do not teach or fairly suggest the claimed article, wherein the treating composition comprises the specific components.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ling-Siu Choi whose telephone number is 571-272-1098.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached on 571-272-1114.

*L-S Choi*

LING-SUI CHOI  
PRIMARY EXAMINER

December 20, 2007